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DERWENT-WEEK: 200262

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TITLE: Apparatus and method for controlling twin roll strip casting

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PATENT-FAMILY:

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APPLICATION-DATA:

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INT-CL (IPC): B22D011/16

ABSTRACTED-PUB-NO: KR2002017028A

BASIC-ABSTRACT:

NOVELTY - An apparatus and a method for controlling twin roll strip casting are provided are provided to cast a strip of superior quality by controlling a twin roll strip caster so that it is promptly and stably reached to the casting steady state from the casting stopping state, thereby casting a strip as simultaneously maintaining constant thickness and roll separation force.

DETAILED DESCRIPTION - The apparatus and the method for controlling twin roll strip casting comprises a main control unit(70) controlling action of total unit for casting a strip according to selection of casting starting and finishing, judging as the steady state the case that a gap detected between a fixed roll(21) and a moving roll(22) is equal to a target gap, and controlling a casting speed afterwards to a uniform velocity; a casting speed controller(51) controlling a casting speed to an acceleration while it is being reached to the steady state, and controlling the casting speed to a uniform velocity in the casting steady state; a load cell(30) detecting a roll separation force caused by solidification of hot metal between the rolls(21,22); a roll separation force/speed controller(52) controlling the

casting speed to an acceleration or deceleration as much as a difference between the detected roll separation force of the load cell(30) and a target roll separation force in the casting steady state; a distance measuring meter(31) measuring a gap between the rolls(21,22); a roll gap controller(61) controlling the servo valve so that the gap detected at the distance measuring meter(31) reaches to a target gap; and a servo valve(62) controlling a cylinder connected to the moving roll(22) according to control signals of the roll gap controller(61).

CHOSEN-DRAWING: Dwg.1/10

TITLE-TERMS: APPARATUS METHOD CONTROL TWIN ROLL STRIP CAST

DERWENT-CLASS: M22 P53

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슬라이드 게이트
(SLIDE GATE)

23

26
M4

스토브
조절기

레이
밸
감출기

레이
밸
제어기

52

21

22

61

30

21

31

34

29

62

41

37

35

36

70

37

35

36

37

주조속도
제어기

압하력/
속도제어기

51

주제어기